STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

IN RE:	)	
	)	
MIDAMERICAN ENERGY COMPANY	)	
	)	
Petition for Declaratory Ruling determining that an additional Certificate of Public Convenience and Necessity pursuant to Section 8-406 of the Illinois Public Utilities Act is not necessary to add a 161,000 volt electric transmission circuit to existing facilities in Rock Island County, Illinois.	)	DOCKET NO. 05-0642

DIRECT TESTIMONY
OF
K. THOMAS ALBERTSON

Q. Please state your name and business address for the record.

A. K. Thomas Albertson. My business address is 106 East Second Street, Davenport, Iowa.

Q. By whom are you employed and in what position?

A. I am employed by MidAmerican Energy Company (MidAmerican). I am the Manager-High Voltage Engineering.

Q. Please describe your education and business experience.

A. I received a Bachelor of Science in Civil Engineering in 1980 from Iowa State University. In 1984, I received a Master of Business Administration degree from

St. Ambrose University. I have been employed by MidAmerican and its predecessor company, Iowa-Illinois Gas and Electric Company, since 1980. My duties included working as an engineer in the Electric Design Division and as Superintendent of the Environmental Services Division for Iowa-Illinois. With Iowa-Illinois' merger into MidAmerican on July 1, 1995, I was named Manager-Transmission Engineering, a position that was subsequently renamed Manager-High Voltage Engineering.

Q. Please describe your duties and responsibilities as Manager-High Voltage Engineering.

A. I oversee high voltage engineering activities for MidAmerican, including the design and construction of MidAmerican's electric high voltage system.

Q. Do you belong to any professional associations?

A. I am a member of the American Society of Civil Engineers. I am also a registered professional engineer in the States of Illinois and Iowa.

Q. What is the business of MidAmerican in Illinois?

A. MidAmerican provides electric and natural gas service in Illinois in the area known as the Quad Cities and other locations in Rock Island, Henry, Whiteside and Mercer Counties.

Q. Is MidAmerican an Illinois public utility subject to the jurisdiction of this Commission?

A. Yes.

Q. Are you familiar with MidAmerican's proposed project to construct, own, operate and maintain a double-circuit 161 kV electric line to serve a proposed substation in Rock Island County, Illinois?

A. Yes, I am.

Q. What are your responsibilities with regard to this project?

A. I am responsible for the design and construction of the proposed lines.

Q. Are you familiar with the Petition for Declaratory Ruling (Petition) filed in this proceeding?

A. Yes, I am.

Q. What is the purpose of this Petition?

A. The purpose of the Petition is to obtain assurance from the Commission that an additional Certificate of Public Convenience and Necessity is not required for MidAmerican to construct, own, operate and maintain a double-circuit 161 kV electric transmission line in Rock Island County, Illinois.

Q. Please provide an overview of this proposed facility.

A. The proposed double-circuit 161 kV line will have an approximate length of 3.3 miles. The proposed double-circuit 161 kV line will commence at MidAmerican's existing Substation 18 in Rock Island, Illinois and will terminate at a proposed MidAmerican substation located in rural Rock Island County to be called the "Oak Grove Substation." MidAmerican Exhibit 1.1 shows the centerline of the route of the proposed double-circuit transmission line, the location of the existing MidAmerican Substation 18 in Rock Island, Illinois, the

location of the proposed Oak Grove Substation in rural Rock Island County and two proposed 161 kV line route alternates.

Q. What is the purpose and necessity for the proposed facilities?

A. As discussed in greater detail in the prepared Direct Testimony of MidAmerican witness Pedersen, MidAmerican Exhibit 2.0, an existing MidAmerican 161 kV line is proposed to be reconstructed to a double-circuit 161 kV line to increase the capacity of the existing line and to accommodate an additional 161 kV line to connect between the new Oak Grove Substation and Substation 18.

Q. Is the proposed construction in an area historically served by MidAmerican?

A. Yes, it is.

Q. What factors were considered in selecting the appropriate route?

A. MidAmerican considers routes which will most directly satisfy the function and purpose of the line. Consideration is given to the terminal points, current land use, land division lines, land use lines, the development of the area, the routes most desirable in terms of the lowest cost and shortest distance, and giving due regard to property owners consistent with our necessary objectives. Routes are selected with a great deal of care and as a result of field investigation and the study of area maps and aerial photographs.

Q. Why does MidAmerican propose to construct the line on the proposed route?

A. MidAmerican proposes to construct the line on the proposed route since it is an existing utility corridor. The line that currently occupies this route was constructed by a MidAmerican predecessor company under Certificate of Public Convenience and Necessity No. 42732 issued by the Illinois Commerce

Commission on November 16, 1955. This route was selected as the proposed route primarily because it minimizes impacts to land use. MidAmerican considered two alternate routes for a double-circuit 161 kV line that would tap an existing MidAmerican 161 kV line, but determined that since both of these alternates would be entirely new routes, each would have greater impact to land use than the proposed route. Since an existing utility corridor was in the area of the needed 161 kV line, and since utilizing that corridor for the new line results in satisfactory electric system performance, MidAmerican proposes to use that existing corridor.

Q. Please describe the location of the proposed double-circuit 161 kV line.

A. The proposed double-circuit 161 kV line will be approximately 3.3 miles in length, would follow the route of an existing MidAmerican 161 kV line on private property and is located primarily in a rural area.

Q. Please describe the easement requirements for the proposed double-circuit 161 kV line?

A. The proposed double-circuit 161 kV line easement width requirements are the same as the easements for the existing 161 kV line, generally 100 feet in width. However, MidAmerican proposes to renegotiate the existing MidAmerican easements to allow the proposed double-circuit 161 kV line.

Q. What type of material will be used in the construction?

A. The proposed double-circuit 161 kV line will be constructed using single steel poles with davit arms on reinforced concrete foundations, as shown in MidAmerican Exhibit 1.2. The proposed double-circuit 161 kV line single pole

structures will be placed in the same relative location and alignment as the existing wood H-frame structures. Transmission spans will average approximately 700 feet. The phase conductors for the proposed double-circuit 161 kV line will be T2 556.5 kcmil, 26/7 ACSR. The proposed lines will be insulated for operation at 161 kV and will be protected from lightning by one 3/8-inch extra high strength steel shield wire and one 0.591 inch diameter fiber optic shield wire.

Q. Who will construct these proposed lines?

A. The proposed lines will be constructed either by MidAmerican crews or by contractors hired by MidAmerican. The supervision, management, engineering, accounting and similar services will be performed by MidAmerican personnel.

Q. How long do you anticipate actual construction will take?

A. MidAmerican anticipates construction of the reinforced foundations and installation of the steel poles, conductor and shield wires to take approximately six months.

Q. Will the proposed project require the removal of existing MidAmerican line facilities?

A. Yes. An existing MidAmerican 161 kV line constructed with wood H-frame two-legged structures would be removed and replaced with single pole double-circuit structures along the proposed route.

Q. What is the total estimated cost of the proposed double-circuit 161 kV line?

A. The total estimated cost to construct the proposed double-circuit 161 kV line is approximately $2.8 million.

Q. Will the facilities, with appurtenances, be constructed in accordance with the orders of the Commission?

A. Yes, construction of the facilities will be done in accordance with the orders of the Commission.

Q. What permits have to be obtained prior to the start of construction?

A. In addition to any Illinois Commerce Commission requirements, it will be necessary to obtain roadway crossing permits from the Illinois Department of Transportation and the Black Hawk and Bowling Township Road Commissions. The U.S. Army Corps of Engineers, the Illinois Department of Natural Resources Office of Water Resources, Illinois Department of Natural Resources Division of Natural Resources Review and the Rock Island County Zoning and Building Department may have permitting requirements that will be pursued by MidAmerican. In addition, MidAmerican plans to enter into any required agreements with the Illinois Department of Agriculture for this work

Q. In your opinion, is the proposed construction, operation and maintenance of the proposed double-circuit 161 kV line and related facilities necessary to provide adequate, reliable and efficient service to MidAmerican's customers?

A. Yes.

Q. Does that conclude your direct testimony in this proceeding?

A. Yes, it does.